THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Applicant(s):	Wilhelm Aures et al.
Appl. No.:	10/089,319
Conf. No.:	7284
Filed:	March 29, 2002
Title:	AUTOMATIC TRIGGERING OF CHANNELS OF LOWER PRIORITY DURING NETWORK OVERLOAD
Art Unit:	2619
Examiner:	G. B. Sefcheck
Docket No.:	0118744-00053

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

APPELLANTS' APPEAL BRIEF

Sir:

Appellants submit this Appeal Brief in support of the Notice of Appeal filed on January 18, 2008. This Appeal is taken from the Notice of Panel Decision from Pre-Appeal Brief Review dated March 14, 2008, and the Final Rejection dated October 18, 2007.

I. REAL PARTY IN INTEREST

The real party in interest for the above-identified patent application on Appeal is Siemens Aktiengesellschaft by virtue of an Assignment dated March 29, 2002 and recorded at reel 012853, frame 0066 in the United States Patent and Trademark Office.

II. RELATED APPEALS AND INTERFERENCES

Appellants' legal representative and the Assignee of the above-identified patent application do not know of any prior or pending appeals, interferences or judicial proceedings which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision with respect to the above-identified Appeal.

III. STATUS OF CLAIMS

Claims 1, 2, 6-14 and 17 are pending in this application. Claims 3-5 and 15-16 have been canceled, and claims 1, 2, 6-14 and 17 are rejected. Claims 1, 2, 6-14 and 17 are being appealed in this Brief. A copy of the appealed claims is included in the Claims Appendix.

IV. STATUS OF AMENDMENTS

A non-final Office Action was mailed April 12, 2007, and Appellants filed a reply on August 13, 2007. Subsequently, a final Office Action was mailed on October 18, 2007, to which Appellants filed a Notice of Appeal and Pre-Appeal Brief on January 18, 2008. Subsequently, Appellant received a Notice of Panel Decision from Pre-Appeal Brief Review dated March 14, 2008. This Appeal Brief was filed in response thereto. A copy of the Non-Final Office Action and Final Office Action are attached as Exhibits A and B, respectively, in the Evidence Appendix.

V. SUMMARY OF CLAIMED SUBJECT MATTER

A summary of the invention by way of reference to the specification and/or figures for each of the independent claims is provided as follows.

Independent claim 1 is directed to a method for controlling instances of access to transmission resources of a communications network KN for transferring information items (vnot), including checking an event of an instance of access to the communications network KN to determine if the amount of transmission resources (VKA1...z) required for the information transfer is currently available in the communications network KN; determining the priority of the instance of access upon ascertaining an amount of currently available transmission resources (VKA1...z) sufficient for the information transfer (vnot); allocating the transmission resources (VKAx) required for the information transfer (vnot) made in the communications network KN in the event of a high priority of the instance of access; and determining at least one of the priority of the instance of access is using destination information items transferred in the course of the current instance of access, and of information items transferred in the course of the current instance of access and representing the type of information items to be transferred, and the priority of the allocated transmission resources by the type of information items transferred, wherein instances of access to the communications network for transferring information items with destination information items identifying an emergency call center have a high priority, the information items to be transferred to the emergency call center being assigned a high priority. See, for example, pages 5-8 on the English translation; Fig. 1; and page 8, line 10 – page 9, line 12, and page 13, line 25 – page 15, line 10.

Independent claim 12 is directed to a communications system for controlling instances of access to transmission resources of a communications network KN, including at least one switching device LE1 arranged in the communications network KN; transmission resources (VKA1...z) assigned to the at least one switching device LE1 and allocated for transmitting information items; a device provided in the event of an instance of access to the transmission resources (VKA1...z) to check the current availability of the transmission resources (VKA1...z) required for the information transfer (vnot); and a determining device, to determine the priority of the instance of access upon ascertaining an amount of currently available transmission resources insufficient for the information transfer, are arranged in the at least one switching

device LE1, wherein the event of a determined high priority of the instance of access are provided in the at least one switching device and the transmission resources (VKAx) required for the information transfer are made available, the determining device to determine the priority of the instance of access are configured such that the priority is determined with at least one of destination information items transferred in the course of the current instance of access, and with information items transferred in the course of the current instance of access and representing the type of the information items to be transferred, the priority of the allocated transmission resources being determined during the information transfer by the type of transferred information items, and instances of access to the communications network for transferring information items with destination information items identifying an emergency call center have a high priority, the information items to be transferred to the emergency call center being assigned a high priority. See, for example, pages 5-8 on the English translation; Fig. 1; and page 8, line 10 – page 9, line 12, and page 13, line 25 – page 15, line 10.

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

1. Claims 1, 2, 6-14 and 17 have been rejected under 35 USC 103(a) as unpatentable over Ertz (US Pat. No. 5,323,444) in view of Shionozaki (US Pat. No. 6,038,214).

VII. ARGUMENT

A.   LEGAL STANDARDS

1.   Obviousness under 35 U.S.C. § 103

The Federal Circuit has held that the legal determination of an obviousness rejection under 35 U.S.C. § 103 is:

> whether the claimed invention as a whole would have been obvious to a person of ordinary skill in the art at the time the invention was made...The foundational facts for the prima facie case of obviousness are: (1) the scope and content of the prior art; (2) the difference between the prior art and the claimed invention; and (3) the level of ordinary skill in the art...Moreover, objective indicia such as commercial success and long felt need are relevant to the determination of obviousness...Thus, each obviousness determination rests on its own facts.

In re Mayne, 41 U.S.P.Q. 2d 1451, 1453 (Fed. Cir. 1997).

In making this determination, the Patent Office has the initial burden of proving a *prima facie* case of obviousness. *In re Rijckaert*, 9 F.3d 1531, 1532, 28 U.S.P.Q. 2d 1955, 1956 (Fed. Cir. 1993). This burden may only be overcome "by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings." *In re Fine*, 837 F.2d 1071, 1074, 5 U.S.P.Q. 2d 1596, 1598 (Fed. Cir. 1988). "If the examination at the initial stage does not produce a prima facie case of unpatentability, then without more the Appellant is entitled to grant of the patent." *In re Oetiker*, 24 U.S.P.Q. 2d 1443, 1444 (Fed. Cir. 1992).

Moreover, the Patent Office must provide explicit reasons why the claimed invention is obvious in view of the prior art. The Supreme Court has emphasized that when formulating a rejection under 35 U.S.C. § 103(a) based upon a combination of prior art elements it remains necessary to identify the reason why a person of ordinary skill in the art would have combined the prior art elements in the manner claimed. *KSR v. Teleflex*, 127 S. Ct. 1727 (2007).

Of course, references must be considered as a whole and those portions teaching against or away from the claimed invention must be considered. *Bausch & Lomb, Inc. v. Barnes-Hind/Hydrocurve Inc.* , 796 F.2d 443 (Fed. Cir. 1986). "A prior art reference may be considered to teach away when a person of ordinary skill, upon reading the reference would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the

path that was taken by the Appellant." *Monarch Knitting Machinery Corp. v. Fukuhara Industrial Trading Co., Ltd.*, 139 F.3d 1009 (Fed. Cir. 1998), quoting, *In re Gurley*, 27 F.3d 551 (Fed. Cir. 1994).

B.   THE CLAIMED INVENTION

The invention relates to a method and apparatus that allows for servicing a high priority (e.g. emergency) call, even if all available lines are currently blocked by low priority calls, by freeing the resource allocated to one of the low priority calls. Figure 1 shows two switching devices LE1,2 arranged in a communications network KN. The first switching device LE1 is connected to a line trunk group LTG arranged in the second switching device LE2 via a further line trunk group LTG and via an outgoing trunk group LBA connected to said line trunk group. The trunk group LBA outgoing from the first switching device LE1 comprises a plurality of time-division-multiplex-oriented transmission channels VKA1...z aligned in the direction of the second switching device LE2, the outgoing trunk group LBA representing the primary route of connections implemented between the first and the second switching device LE1,2.

An emergency call center NOT – for example a police or firefighting unit – is connected to the second switching device LT2 via k trunks or transmission channels VL1...k, the k trunks VL1...k being connected via a front-end device to a line trunk group LTG arranged in the second switching device LE2. Arranged in the two switching devices LE1,2 is a central switching network SN, connected to the respective line trunk groups LTG, for switching connections and/or connection requests incoming and outgoing at the respective switching devices LE1,2. The central switching network SN is connected to a centrally arranged, coordinating control unit CP, which is assigned a database DB in each case. In the event of connection requests incoming at the switching devices LE1,2, the respective control unit CP evaluates signaling and/or dialing information items transferred in the course of the connection setup, and controls the switching or switching through of the transmission channels VKE1...z, VKA1...z, incoming and outgoing at the respective switching device LE1,2, as a function of the respectively determined dialing or destination information.

In each database DB assigned to a switching device LE1,2 and provided for the digit evaluation, the destinations respectively representing an emergency call center NOT are marked by an appropriate identifier, an identifier representing the traffic type of emergency call being

assigned to a connection that is incoming at a switching device LE1,2 and is to be switched at an emergency call center NOT. For each connection switched or switched through via a switching device LE1,2, this identifier representing the traffic type transferred via the respective connection is stored in the appropriate switching device LE1,2, for example in a further database assigned to the central control unit CP. For example, connections switched or switched through to an emergency call center NOT via a switching device LE1,2 or via a transit switching device have the identifier "traffic type: emergency call". If a requested connection can be successfully switched or switched through to the dialed destination inside a switching device LE1,2, the switching or switching-through operation is performed independently of the traffic type determined during the connection setup, that is to say independently of whether the destination has an identifier representing an emergency call center, or not.

It may be assumed for the further exemplary embodiment that the subscriber A TLNA requests via the communications terminal KE an emergency call connection (VN) for the purpose of transferring an emergency call to the nearest emergency call center NOT. It may also be assumed that trunk groups LBA outgoing from the first switching device LE1 in the direction of the second switching device LE2, that is transmission channels VKA1...z directed via the primary route and, possibly, via existing overflows in the direction of second switching device LE2 are busy. For example, a normal telephone connection vtel is run from the telephone network KN to the first switching device LE1 via the xth transmission channel VKEx arranged in the incoming trunk group LBE. The telephone connection vtel is switched through or passed on in the direction of the second switching device LE2 to the xth transmission channel VKAx(vtel) inside the outgoing trunk group LBA of the primary route via the switching network SN arranged in the first switching device LE1. The telephone connection vtel run to the second switching device LE2 is passed on via the switching network SN to a communications terminal and/or subscriber – not illustrated – connected to the second switching device LE2.

During evaluation of the destination information items transmitted by the subscriber A TLNA – for example dial digits identifying the emergency call center – by means of the control unit CP arranged in the first switching device LE, the emergency call center NOT connected to the second switching device LE2 is, for example, determined as the nearest emergency call center. It is not possible on the basis of the described utilization of the communications network KN to determine in the course of the connection setup any free link or any free transmission

channel VBA1...z inside the trunk group LBA outgoing within the framework of the primary route and the overflows. This state is also denoted as "congested". According to the invention, in the case of a connection requested in the "congested" state the traffic type of the connection to be switched is determined by evaluating the destination information items. If a connection to be switched is not assigned the identifier "traffic type: emergency call", or not assigned an alternative identifier representing a high priority - not described in more detail in this exemplary embodiment – the requested connection is rejected. The connections not having the identifier "traffic type: emergency call" are also denoted below as non-emergency call connections. The rejection of non-emergency call connections in the "congested" state is achieved, for example, by applying a "congested tone" representing the "congested" state and by revertive clearing of the initiated connection setup. If, however, during a connection setup a connection having the identifier "traffic type: emergency call" is determined when evaluating the signaled destination information items, an "automatic triggering mechanism" is started in the course of which the connections currently being conducted in the outgoing trunk group LBA of the primary route are analyzed. According to the invention, there is randomly determined inside the outgoing trunk group LBA of the primary route a transmission channel – here the xth VKAx, for example – via which a current non-emergency call connection – here the normal telephone connection vtel – is carried. The randomly determined non-emergency call connection vtel, or the determined xth transmission channel VKAx is subsequently cleared automatically by the first switching device LE1. An appropriate message or a suitable signaling tone can advantageously be transferred to the subscribers of the automatically cleared connection VKAx.

The emergency call connection vnot requested by the subscriber A TLNA is subsequently switched through via the cleared transmission channel VKAx and marked with the (transient) identifier "traffic type: emergency call". Note that the identifier "traffic type: emergency call" is not signaled between the switching devices LE1,2; in each switching device LE1,2, the identifier "traffic type: emergency call" can be derived from emergency call connections to be switched with the aid of the transferred destination and/or dialing information items from the information items stored in the respective database DB.

In the second switching device LE2, the emergency call connection vnot run up via the cleared transmission channel VKAx is passed on to the connected emergency call center NOT. The emergency call connection vnot switched through by means of the "automatic triggering

mechanism" is illustrated in the block diagram by a dashed arrow. In this exemplary embodiment, the emergency call center is connected to the second switching device LE2 via k trunks VL1...k. The k trunks VL1...k are each relevant to emergency calls in this variant connection. For the case in which all k trunks VL1...k are busy − for example owing to a plurality of incoming emergency calls and/or telephone connections outgoing from the emergency call center NOT − it is possible in the case of a further emergency call connection vnot initiated, for example, by the subscriber A TLNA that none of the connection currently carried via the k trunks VL1...k are automatically cleared, such that in this case the emergency call connection v not initiated by the subscriber A TLNA and passed on to the second switching device LE2 via the cleared transmission channel VKAx cannot in principle be passed on to the emergency call center NOT.

      C.   THE REJECTION OF CLAIMS 1-2, 6-14 AND 17 UNDER 35 USC 103(a) AS BEING UNPATENTABLE OVER ERTZ IN VIEW OF SHIONOZAKI IS IMPROPER

Claims 1-2, 6-16 and 17 stand rejected under 35 USC §103(a) as being unpatentable over U.S. Patent No. 5,323,444 ("Ertz") in view of U.S. Patent No. 6,038,214. Applicant respectfully disagrees and contends that independent claims 1 and 12 and their respective dependent claims are allowable over this combination.

Ertz discloses a community emergency response system which routes emergency calls to three different types of destinations. If the system is initially unable to route an emergency call to one of the three types of destinations, a last chance routing facility linearly checks destinations to ensure that the availability of any previously unchecked destination is determined. If the system is still unable to route the emergency call, the call is disconnected. All emergency calls have the same priority and competition for communications resources with non-emergency calls is not addressed.

At pages 3 and 12, the final Office Action discusses the relevance of Ertz to claim 1. Essentially, the Examiner argues that Ertz discloses determining the priority of a call using destination information items transferred in the course of the call because Ertz discloses using the ANI ("automatic number identification") of a call to look up an appropriate call handling destination in an ESN ("emergency service number") table. More specifically, the ANI of a call

indicates from where the call originated, and the ANI is used to determine the nearest public safety answering point where an emergency call is to be routed.

However, neither the ANI nor the information in the ESN table are used to determine the priority of a call. In fact, Ertz does not disclose determining a priority of a call at all. Ertz only discusses "priority" in terms of prioritizing destinations to which a call may be routed. Specifically, an emergency call is routed to the nearest public safety answering point or to another public safety answering point if the nearest point is not available. Thus, the destinations for a particular call can be distinguished by their priority, but there is no mechanism for determining a priority of a call or for distinguishing calls by such non-existent priorities. In Ertz, the information represented by the "destinations being in a preferred priority" is not used to conduct allocation of network resources to an instance of access to the communication network.

In the instant application, on the other hand, the priority level of an incoming call determines whether the call may interrupt another call in order to service the incoming (e.g. emergency) call. The destination data is used to determine a priority of a call based on which allocation of network resources will take place. Hence, apart from the fact that information items transmitted from the caller are used while establishing the emergency call, there is no further correlation between Ertz and the claimed invention.

Applicants therefore submit that Ertz fails to disclose or suggest that a priority of an access to the communications network will be determined using destination information items transferred in the course of the current instance of access, as required by the claims (see, for example, claims 1 and 12). Moreover, Ertz fails to disclose assigning a high priority to access transferring information items with destination information items identifying an emergency call center.

The Office Action admits that Ertz does not disclose or suggest that information transfer are released or made available or corresponding transmission resources allocated for the transfer of information items assigned a low priority are released or made available. For this feature, the Office Action relies upon Shionozaki. However, it is respectfully submitted that it is improper to combine Ertz and Shionozaki.

Shionozaki discloses a communication controlling system in which communication nodes reallocate resources based on the priority of communication sessions therein. As a result, a higher priority communication can preempt resources from a lower priority communication.

14

One of ordinary skill in the art would not combine the teachings of Ertz with Shionozaki because Ertz teaches away from combination with Shionozaki. As noted above, Ertz only addresses emergency calls. Preempting the resources of any of the emergency calls being routed by Ertz would result in an emergency call in progress being dropped. The dropped caller is likely to call back, resulting in delays when the caller is routed to a different destination and/or a chain reaction of additional dropped emergency calls. Such an undesirable result would prevent one of ordinary skill in the art from combining Ertz with Shionozaki.

However, even assuming *arguendo* Ertz and Shionozaki can be properly combined, like Ertz, Shionozaki fails to disclose or suggest that a priority of an access to the communications network will be determined using destination information items transferred in the course of the current instance of access.

For at least the above reasons, Applicant submits that independent claims 1 and 12 and their respective dependent claims, are allowable over the cited prior art.

VIII. CONCLUSION

Appellants respectfully submit that the Examiner has failed to establish that the applied references disclose each and every limitation of the claimed invention under 35 U.S.C. § 103 with respect to the rejection of Claims 1, 2, 6-14 and 17. Accordingly, Appellants respectfully submit that the anticipation rejection is erroneous in law and in fact and should therefore be reversed by this Board.

The Director is authorized to charge any additional fees which may be required, or to credit any overpayment to Deposit Account No. 02-1818. If such a withdrawal is made, please indicate the Attorney Docket No. 118744-53 on the account statement.

Respectfully submitted,

BELL, BOYD & LLOYD LLP

By _____
Kevin R. Spivak
Reg. No. 43,148
Customer No. 29177
Phone: 202-466-6300

Dated: <u>April 14, 2008</u>

CLAIMS APPENDIX

PENDING CLAIMS ON APPEAL OF U.S. PATENT APPLICATION SERIAL NO. 10/089,319

A copy of the appealed claims is included in the Claims Appendix.

1.   A method for controlling instances of access to transmission resources of a communications network for transferring information items, comprising:
checking an event of an instance of access to the communications network to determine if the amount of transmission resources required for the information transfer is currently available in the communications network;

determining the priority of the instance of access upon ascertaining an amount of currently available transmission resources sufficient for the information transfer;

allocating the transmission resources required for the information transfer made in the communications network in the event of a high priority of the instance of access; and

determining at least one of the priority of the instance of access is using destination information items transferred in the course of the current instance of access, and of information items transferred in the course of the current instance of access and representing the type of information items to be transferred, and the priority of the allocated transmission resources by the type of information items transferred, wherein instances of access to the communications network for transferring information items with destination information items identifying an emergency call center have a high priority, the information items to be transferred to the emergency call center being assigned a high priority.

2.   The method as claimed in claim 1, wherein the transmission resources made available are allocated for the information transfer.

3.   (canceled)

4.   (canceled)

5.   (canceled)

6.   The method as claimed in claim 1, wherein the required transmission resources are determined and made available randomly.

7.   The method as claimed in claim 1, wherein the transmission resources made available are allocated to the instances of access, having a high priority, for the information transfer, the allocated transmission resources being assigned a high priority.

8.   The method as claimed in claim 1, wherein the transmission resources are arranged between switching devices arranged in the communications network and/or between a switching device of the communications network and at least one front-end device arranged in the subscriber access area of the switching device.

9.   The method as claimed in claim 8, wherein

when the transmission resources required for the information transfer are available, an identifier is formed for the corresponding front-end device between the at least one switching device and the at least one assigned front-end device and stored in the corresponding switching device, and

in the case of the identifier stored for the at least one front-end device, a reduced amount of the transmission resources arranged between the at least one switching device and the at least one front-end device is used or allocated for the transmission of information items having a low priority.

10.   The method as claimed in claim 9, wherein the identifier set for the at least one front-end device is reset or erased upon expiration of a prescribed time interval in which the reduced amount of transmission resources for the transfer of information items having a low priority is not exceeded.

11.   The method as claimed in claim 1, wherein the transmission resources are implemented by a prescribed number of trunks or by a prescribed number of time-division-multiplex-oriented transmission channels.

12.   A communications system for controlling instances of access to transmission resources of a communications network, comprising:

at least one switching device arranged in the communications network; transmission resources assigned to the at least one switching device and allocated for transmitting information items;

a device provided in the event of an instance of access to the transmission resources to check the current availability of the transmission resources required for the information transfer; and

a determining device, to determine the priority of the instance of access upon ascertaining an amount of currently available transmission resources insufficient for the information transfer, are arranged in the at least one switching device, wherein

the event of a determined high priority of the instance of access are provided in the at least one switching device and the transmission resources required for the information transfer are made available,

the determining device to determine the priority of the instance of access are configured such that the priority is determined with at least one of destination information items transferred in the course of the current instance of access, and with information items transferred in the course of the current instance of access and representing the type of the information items to be transferred, the priority of the allocated transmission resources being determined during the information transfer by the type of transferred information items, and

instances of access to the communications network for transferring information items with destination information items identifying an emergency call center have a high priority, the information items to be transferred to the emergency call center being assigned a high priority.

13.   The communications system as claimed in claim 12, wherein the device for rendering available the required transmission resources is configured such that the transmission resources made available are allocated to the instance of access for the information transfer.

14.   The communications system as claimed in claim 12, wherein

the allocatable transmission resources assigned to the at least one switching device are arranged between at least one of the at least one switching device and at least one further switching device, and

are arranged between the at least one switching device and at least one front-end device arranged in the subscriber access area of the switching device.

15.   (canceled)

16.   (canceled)

17.   The communications system as claimed in claim 12, wherein the transmission resources assigned to the switching device are implemented by trunks outgoing from the at least one switching device, or by outgoing, time-division-multiplex-oriented transmission channels.

RELATED PROCEEDINGS APPENDIX

None.

EVIDENCE APPENDIX

EXHIBIT A: Non-Final Office Action April 12, 2007

EXHIBIT B: Final Office Action October 18, 2007

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/089,319	03/29/2002	Wilhelm Aures	449122026300	7284

7590 04/12/2007		EXAMINER
MORRISON & FOERSTER LLP		SEFCHECK, GREGORY B
1650 TYSONS BOULEVARD		
SUITE 300		ART UNIT / PAPER NUMBER
McLEAN, VA 22102		2616

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/12/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)
Office Action Summary	10/089,319	AURES ET AL.
	Examiner	Art Unit	
	Gregory B. Sefcheck	2616	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>25 January 2007</u>.

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-17</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1-17</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on <u>20 June 2006</u> is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
         application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

- Applicant's Request for Continued Examination filed 1/25/2007 is acknowledged.

- Claims 1 and 12 have been amended.

- Claims 1-17 remain pending.

Claim Objections

1.   Claims 5 and 16 are objected to under 37 CFR 1.75(c), as being of improper dependent

form for failing to further limit the subject matter of a previous claim. Applicant is required to

cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or

rewrite the claim(s) in independent form.

        The present amendments to claim 1 (and 12) introduce the limitations of claim 5 (and

16) into claim 1 (and 12), from which claim 5 (and 16) is dependent. As such, the limitations of

claim 5 (and 16) do not further limit claim 1 (and 12) upon entry of the amendments.

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of
this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter
as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which
said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3.   Claims 1-17 rejected under 35 U.S.C. 103(a) as being unpatentable over Ertz et al.

(US005323444A), hereafter Ertz, in view of Shionozaki (US006038214A).

-   Regarding Claims 1 and 5,

Ertz teaches a method for controlling instances of access to transmission resources of a communications network for transferring information items (Fig. 1, Abstract lines 1-18) referenced by the control of a call to a Public Safety Answering Point based on it's call capacity before the call is routed, comprising checking an event of an instance of access to the communications network to determine if the amount of transmission resources required for the information transfer is currently available in the communications network (Fig. 63, col. 104 lines 17-67, col. 105 lines 1-30) referenced by the determination if the PSAP of the network is at Call Capacity before routing the call to the PSAP, determining the priority of the instance of access upon ascertaining an amount of currently available transmission resources insufficient for the information transfer (Fig. 19(a), col. 10 lines 45-67, claim 38 lines 1-28, Fig. 20) referenced by the initial destination lookup from an Emergency Service Number table based on ANI step 3 and an emergency call to a PSAP being a preferred priority with alternate routing applied Step 109 in the event PSAP is at capacity, and allocating the transmission resources required for the information transfer made in the communications network in the event of a high priority of the instance of access (Fig. 62, col. 103 lines 17-67, col. 104 lines 1-16) referenced by the determination the PSAP is at Call Capacity and Routing Fails step 12 and Get Alternative step 13 is performed.

Ertz does not teach for the information transfer are released or made available or corresponding transmission resources allocated for the transfer of information items assigned a low priority are released or made available.

Shionozaki discloses a method and apparatus that enables reallocation of resources

from low priority sessions to meet he demand of a higher priority session (Abstract; Fig. 3).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Ertz by enabling the allocation of resources for the required information transfer by freeing resources of existing, lower priority sessions, as taught by Shionozaki. This would maximize the available resources of a network while accommodating the highest priority sessions.

- Regarding Claim 2,

Ertz teaches wherein the transmission resources made available are allocated for the information transfer (Fig. 19(a), col. 10 lines 45-67) referenced by the Route Call step 23 followed by Routing is Successful step 24 wherein the transmission resources for the call is allocated.

- Regarding Claim 3,

Ertz teaches further comprising determining at·lest one of the priority of the instance of access is using destination information items transferred in the course of the current instance of access (Fig. 10, Fig. 19(a), col. 10 lines 45-67) referenced by the incoming call processed through a check destination facility 630 wherein the ANI is used to determine a priority call from the Emergency Service Number table step 3, and of information items transferred in the course of the current instance of access and representing the type of information items to be transferred (Fig. 19(a), col. 10 lines 45-67, Fig. 20) referenced by the ANI being an emergency type of information from the ESN table search of step 3 to

determine an available PSAP, and the priority of the allocated transmission resources by

the type of information items transferred (Fig. 20, col. 12 lines 39-57, claim 38 lines 1-28)

referenced by the Check Destination 100 for preferred priority calls to PSAP 103 or non

priority PSTN Destination Number 101.

    - Regarding Claim 4,

    Ertz teaches wherein instances of access to the communications network for

transferring information items with destination information items identifying an emergency

call center have a high priority (col. 3 lines 63-66, Fig. 20, col. 12 lines 39-57, claim 38

lines 1-28) referenced by the Check Destination 100 for preferred priority calls to Public

Safety Access Point 103 which is an emergency call center for E9-1-1 calls, the

information items to be transferred to the emergency call center being assigned a high

priority (Fig. 20, col. 12 lines 39-57, claim 38 lines 1-28) referenced by the preferred priority

of calls to PSAP.

    - Regarding Claim 6,

    Ertz teaches wherein the required transmission resources are determined and made

available randomly (Fig. 63, col. 105 lines 19-26) referenced by the acceptance by the

PSAP of another call step 17 without limitation on a particular trunk line.

- Regarding Claim 7,

Ertz teaches wherein the transmission resources made available are allocated to the instances of access having a high priority (Fig. 1, col. 8 lines 30-66, claim 38 lines 6) referenced by the subscriber being an Emergency Service Requestor initiates an E9-1-1 call 201 which are preferred priority calls checked against an Emergency Service Number table 213 for routing to a PSAP, for the information transfer the allocated transmission resources being assigned a high priority (Fig. 20, col. 12 lines 39-57, claim 38 lines 1-28) referenced by the preferred priority of calls to PSAP routed to an available PSAP destination step 103.

- Regarding Claim 8,

Ertz teaches wherein the transmission resources are arranged between switching devices arranged in the communications network (Fig. 1, col. 8 lines 58-67, col. 9 lines 1-12) referenced by the Public Telephone Network 219 and the Call Routing Switch 218 of Platform 204, and/or between a switching device of the communications network and at least one front-end device arranged in the subscriber access area of the switching device (Fig. 2, col. 10 lines 8-29, lines 45-67) referenced by the Call Routing Switch 218 and the Applications Processor 234 which is a front end for searching the TN/ESN table 213 using a combination of NPD and ANI information which is accessible through Workstation 212.

- Regarding Claims 9 and 10,

Ertz does not explicitly disclose forming and storing an identifier for the

corresponding front-end device in the switching device when the transmission resources required are available, where the identifier indicates a reduced amount of resources for the transmission of information items having a low priority. Ertz also does not explicitly discloses erasing or resetting the identifier upon expiration of a prescribed time interval in which the reduced amount of resources allocated for information items having a low priority is not exceeded.

Shionozaki discloses that the states (identifier) of sessions having resources allocated to it are stored and then changed to reflect a preemption or change of low priority sessions to accommodate higher priority sessions. Shionozaki further shows that the states are returned to their original states after a predetermined time has elapsed (Fig. 4).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Ertz by storing the states of resource-allocated sessions, updating those states to reflect a reduction in resource allocation for preempted/changed low priority sessions to accommodate higher priority sessions and resetting the states after a predetermined time has elapsed, as shown by Shionozaki. This would maximize the available resources of a network in accommodating the highest priority sessions while enabling the network to keep track of which low priority sessions have surrendered resources to higher priority sessions such that the resources could be re-allocated back to the low priority session after the higher priority session is completed.

- Regarding Claim 11,

Ertz teaches wherein the transmission resources are implemented by a prescribed number of trunks or by a prescribed number of time-division-multiplexoriented transmission channels (Fig. 1, col. 8 lines 58-66) referenced by the incoming Emergency Service trunk 206 from the Public Telephone Network 219 which are inherently time division multiplexed.

- Regarding Claim 12 and 16,

Ertz teaches a communications system for controlling instances of access to transmission resources of a communications network (Fig. 1, Abstract lines 1-18) referenced by the control of a call to a Public Safety Answering Point based on it's call capacity before the call is routed, comprising at least one switching device arranged in the communications network (Fig. 1, col. 8 lines 58-67, col. 9 lines 1-12) referenced by the Platform 204 with Call Routing Switch 218, transmission resources assigned to the at least one switching device and allocated for transmitting information items (Fig. 1, col. 8 lines 30-43) referenced by the incoming/outgoing trunks 206 of the Call. Routing Switch 218, and a device provided in the event of an instance of access to the transmission resources to check the current availability of the transmission resources required for the information transfer (Fig.1, Fig. 63, col. 104 lines 17-67, col. 105 lines 1-30) referenced by the Application Processor 234 determination if the PSAP of the network is at Call Capacity before routing the call to the PSAP, a determining device to determine the priority of the instance of access upon ascertaining an amount of currently available transmission resources insufficient for the information transfer are arranged in the at least one switching

device (Fig. 1, Fig. 63, col. 104 lines 17-67, col. 105 lines 1-30, Fig. 20) referenced by the

preferred priority of calls to PSAP and the Platform 204 determination if the PSAP is at call

capacity and cannot accept any more calls step 18 through the associated trunks of the call

routing switch 218 resulting in Use Alternate Routing Step 109, and the event of a

determined high priority of the instance of access are provided in the at least one switching

device and the transmission resources required for the information transfer are made

available (Fig. 19(a), col. 10 lines 45-67, col. 11 lines 1-15, claim 38 lines 1-28)

referenced by the initial destination lookup from an Emergency Service Number table

based on ANI step 3 and Get Alternative step 13 if the PSAP is at capacity to obtain

alternate transmission resources with the emergency call to a PSAP being a preferred

priority.

Ertz does not teach for the information transfer are released or made available or

corresponding transmission resources allocated for the transfer of information items

assigned a low priority are released or made available.

Shionozaki discloses a method and apparatus that enables reallocation of resources

from low priority sessions to meet he demand of a higher priority session (Abstract; Fig. 3).

It would have been obvious to one of ordinary skill in the art at the time of the

invention to modify Ertz by enabling the allocation of resources for the required information

transfer by freeing resources of existing, lower priority sessions, as taught by Shionozaki.

This would maximize the available resources of a network while accommodating the highest

priority sessions.

- Regarding Claim 13,

Ertz teaches wherein the device for rendering available the required transmission resources is configured such that the transmission resources made available are allocated to the instance of access for the information transfer (Fig. 1, Fig. 63, col. 105 lines 19-26) referenced by the Platform 204 determination that the destination PSAP is not at capacity and can accept another call step 17 wherein the call is routed to the PSAP.

- Regarding Claim 14,

Ertz teaches wherein the allocated transmission resources assigned to the at least one switching device are arranged between at least one of the at least one switching device and at least one further switching device (Fig. 1, col. 8 lines 58-67, col. 9 lines 1-12) referenced by the Public Telephone Network 219 which inherently is composed of telephone switching devices and the Call Routing Switch 218 of Platform 204, and are arranged between the at least one switching device and at least one front-end device arranged in the subscriber access area of the switching device (Fig. 2, col. 10 lines 8-29, lines 45-67) referenced by the Call Routing Switch 218 and the Applications Processor 234 which is a front end for searching the TN/ESN table 213 using a combination of NPD and ANI information which is accessible through Workstation 212.

- Regarding Claim 15,

Ertz teaches wherein the determining device to determine the priority of the instance of access are configured such that the priority is determined with at least one of

destination information items transferred in the course of the current instance of access

(Fig. 1, col. 10 lines 45-61, Fig. 20, col. 12 lines 39-57, claim 38 lines 1-28) referenced by

the Platform 204 performing a Check Destination 100 for preferred priority calls to PSAP

103 or non priority PSTN Destination Number 101 wherein the preferred priority call is

based on emergency 9-1-1 digits of the current call and the ANI identifier, and with

information items transferred in the course of the current instance of access and

representing the type of the information items to be transferred (col. 10 lines 45-61)

referenced by the emergency 9-1-1 digits and the ANI of the current call representing a

preferred priority, the priority of the allocated transmission resources being determined

during the information transfer by the type of transferred information items (Fig. 1, col. 10

lines 45-61, Fig. 20, col. 12 lines 39-57, claim 38 lines 1-28) referenced by the Platform

204 performing a Check Destination 100 for preferred priority calls to PSAP 103 or non

priority PSTN Destination Number 101 wherein the preferred priority call is based on

emergency 9-1-1 digits of the current call and the ANI identifier.

     - Regarding Claim 17,

     Ertz teaches wherein the transmission resources assigned to the switching

device are implemented by trunks outgoing from the at least one switching device or by

outgoing time-division-multiplex-oriented transmission channels (Fig. 1, col. 8 lines 58-

66) referenced by the Emergency Service trunk 206 to/from the Call Routing Switch 218

from the Public Telephone Network 219 and the outgoing trunks to the Public

Telephone Network 219 for termination to the PSAP all of which are inherently time

division multiplexed lines.

Response to Arguments

4.   Applicant's arguments with respect to claims 1-17 have been considered but are moot in

view of the new ground(s) of rejection.

Conclusion

5.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

- Combs et al. (US006665701B1)

- Gerszberg et al. (US006452923B1)

        Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Gregory B. Sefcheck whose telephone number is 571-272-

3098. The examiner can normally be reached on Monday-Friday, 8:00am-4:30pm.

        If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

GBS *695*
4-3-2007

Seema S. Rao 4/11/07
SEEMA S. RAO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/089,319	03/29/2002	Wilhelm Aures		7284

29177   7590   10/18/2007
BELL, BOYD & LLOYD, LLP
P.O. BOX 1135
CHICAGO, IL 60690

EXAMINER
SEFCHECK, GREGORY B

ART UNIT	PAPER NUMBER
2619	

MAIL DATE	DELIVERY MODE
10/18/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/089,319	AURES ET AL.
	Examiner	Art Unit	
	Gregory B. Sefcheck	2619	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 August 2007*.

2a)☒ This action is FINAL.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,6-14 and 17* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,6-14 and 17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)
1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

• Applicant's Amendment filed 8/13//2007 is acknowledged.

• Claims 1 and 12 have been amended.

• Claims 3-5, 15, and 16 have been cancelled.

• The previous objections to claims 5 and 16 are moot.

• Claims 1, 2, 6-14, and17 remain pending.

Claim Rejections - 35 USC § 103

1.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of
this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter
as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which
said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2.   Claims 1, 2, 6-14, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Ertz et al. (US005323444A), hereafter Ertz, in view of Shionozaki (US006038214A).

        -    Regarding Claims 1 and 5,

        Ertz teaches a method for controlling instances of access to transmission resources of

a communications network for transferring information items (Fig. 1, Abstract lines 1-18)

referenced by the control of a call to a Public Safety Answering Point based on it's call

capacity before the call is routed, comprising checking an event of an instance of access to

the communications network to determine if the amount of transmission resources required

for the information transfer is currently available in the communications network (Fig. 63, col. 104 lines 17-67, col. 105 lines 1-30) referenced by the determination if the PSAP of the network is at Call Capacity before routing the call to the PSAP, determining the priority of the instance of access upon ascertaining an amount of currently available transmission resources insufficient for the information transfer (Fig. 19(a), col. 10 lines 45-67, claim 38 lines 1-28, Fig. 20) referenced by the initial destination lookup from an Emergency Service Number table based on ANI step 3 and an emergency call to a PSAP being a preferred priority with alternate routing applied Step 109 in the event PSAP is at capacity, and allocating the transmission resources required for the information transfer made in the communications network in the event of a high priority of the instance of access (Fig. 62, col. 103 lines 17-67, col. 104 lines 1-16) referenced by the determination the PSAP is at Call Capacity and Routing Fails step 12 and Get Alternative step 13 is performed.

Ertz teaches further comprising determining at lest one of the priority of the instance of access is using destination information items transferred in the course of the current instance of access (Fig. 10, Fig. 19(a), col. 10 lines 45-67) referenced by the incoming call processed through a check destination facility 630 wherein the ANI is used to determine a priority call from the Emergency Service Number table step 3, and of information items transferred in the course of the current instance of access and representing the type of information items to be transferred (Fig. 19(a), col. 10 lines 45-67, Fig. 20) referenced by the ANI being an emergency type of information from the ESN table search of step 3 to determine an available PSAP, and the priority of the allocated transmission resources by the type of information items transferred (Fig. 20, col. 12 lines 39-57, claim 38 lines 1-28)

referenced by the Check Destination 100 for preferred priority calls to PSAP 103 or non

priority PSTN Destination Number 101.

Ertz teaches wherein instances of access to the communications network for

transferring information items with destination information items identifying an emergency

call center have a high priority (col. 3 lines 63-66, Fig. 20, col. 12 lines 39-57, claim 38

lines 1-28) referenced by the Check Destination 100 for preferred priority calls to Public

Safety Access Point 103 which is an emergency call center for E9-1-1 calls, the

information items to be transferred to the emergency call center being assigned a high

priority (Fig. 20, col. 12 lines 39-57, claim 38 lines 1-28) referenced by the preferred priority

of calls to PSAP.

Ertz does not teach for the information transfer are released or made available or

corresponding transmission resources allocated for the transfer of information items

assigned a low priority are released or made available.

Shionozaki discloses a method and apparatus that enables reallocation of resources

from low priority sessions to meet he demand of a higher priority session (Abstract; Fig. 3).

It would have been obvious to one of ordinary skill in the art at the time of the

invention to modify Ertz by enabling the allocation of resources for the required information

transfer by freeing resources of existing, lower priority sessions, as taught by Shionozaki. This

would maximize the available resources of a network while accommodating the highest priority

sessions.

- Regarding Claim 2,

Ertz teaches wherein the transmission resources made available are allocated for the information transfer (Fig. 19(a), col. 10 lines 45-67) referenced by the Route Call step 23 followed by Routing is Successful step 24 wherein the transmission resources for the call is allocated.

- Regarding Claim 6,

Ertz teaches wherein the required transmission resources are determined and made available randomly (Fig. 63, col. 105 lines 19-26) referenced by the acceptance by the PSAP of another call step 17 without limitation on a particular trunk line.

- Regarding Claim 7,

Ertz teaches wherein the transmission resources made available are allocated to the instances of access having a high priority (Fig. 1, col. 8 lines 30-66, claim 38 lines 6) referenced by the subscriber being an Emergency Service Requestor initiates an E9-1-1 call 201 which are preferred priority calls checked against an Emergency Service Number table 213 for routing to a PSAP, for the information transfer the allocated transmission resources being assigned a high priority (Fig. 20, col. 12 lines 39-57, claim 38 lines 1-28) referenced by the preferred priority of calls to PSAP routed to an available PSAP destination step 103.

- Regarding Claim 8,

Ertz teaches wherein the transmission resources are arranged between switching devices arranged in the communications network (Fig. 1, col. 8 lines 58-67, col. 9 lines 1-12) referenced by the Public Telephone Network 219 and the Call Routing Switch 218 of Platform 204, and/or between a switching device of the communications network and at least one front-end device arranged in the subscriber access area of the switching device (Fig. 2, col. 10 lines 8-29, lines 45-67) referenced by the Call Routing Switch 218 and the Applications Processor 234 which is a front end for searching the TN/ESN table 213 using a combination of NPD and ANI information which is accessible through Workstation 212.

- Regarding Claims 9 and 10,

Ertz does not explicitly disclose forming and storing an identifier for the corresponding front-end device in the switching device when the transmission resources required are available, where the identifier indicates a reduced amount of resources for the transmission of information items having a low priority. Ertz also does not explicitly discloses erasing or resetting the identifier upon expiration of a prescribed time interval in which the reduced amount of resources allocated for information items having a low priority is not exceeded.

Shionozaki discloses that the states (identifier) of sessions having resources allocated to it are stored and then changed to reflect a preemption or change of low priority sessions to accommodate higher priority sessions. Shionozaki further shows that the states are returned to their original states after a predetermined time has

elapsed (Fig. 4).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Ertz by storing the states of resource-allocated sessions, updating those states to reflect a reduction in resource allocation for preempted/changed low priority sessions to accommodate higher priority sessions and resetting the states after a predetermined time has elapsed, as shown by Shionozaki. This would maximize the available resources of a network in accommodating the highest priority sessions while enabling the network to keep track of which low priority sessions have surrendered resources to higher priority sessions such that the resources could be re-allocated back to the low priority session after the higher priority session is completed.

- Regarding Claim 11,

Ertz teaches wherein the transmission resources are implemented by a prescribed number of trunks or by a prescribed number of time-division-multiplexoriented transmission channels (Fig. 1, col. 8 lines 58-66) referenced by the incoming Emergency Service trunk 206 from the Public Telephone Network 219 which are inherently time division multiplexed.

- Regarding Claim 12,

Ertz teaches a communications system for controlling instances of access to
transmission resources of a communications network (Fig. 1, Abstract lines 1-18)
referenced by the control of a call to a Public Safety Answering Point based on it's call
capacity before the call is routed, comprising at least one switching device arranged in the
communications network (Fig. 1, col. 8 lines 58-67, col. 9 lines 1-12) referenced by the
Platform 204 with Call Routing Switch 218, transmission resources assigned to the at least
one switching device and allocated for transmitting information items (Fig. 1, col. 8 lines
30-43) referenced by the incoming/outgoing trunks 206 of the Call. Routing Switch 218, and
a device provided in the event of an instance of access to the transmission resources to
check the current availability of the transmission resources required for the information
transfer (Fig.1, Fig. 63, col. 104 lines 17-67, col. 105 lines 1-30) referenced by the
Application Processor 234 determination if the PSAP of the network is at Call Capacity
before routing the call to the PSAP, a determining device to determine the priority of the
instance of access upon ascertaining an amount of currently available transmission
resources insufficient for the information transfer are arranged in the at least one switching
device (Fig. 1, Fig. 63, col. 104 lines 17-67, col. 105 lines 1-30, Fig. 20) referenced by the
preferred priority of calls to PSAP and the Platform 204 determination if the PSAP is at call
capacity and cannot accept any more calls step 18 through the associated trunks of the call
routing switch 218 resulting in Use Alternate Routing Step 109, and the event of a
determined high priority of the instance of access are provided in the at least one switching
device and the transmission resources required for the information transfer are made

available (Fig. 19(a), col. 10 lines 45-67, col. 11 lines 1-15, claim 38 lines 1-28)

referenced by the initial destination lookup from an Emergency Service Number table

based on ANI step 3 and Get Alternative step 13 if the PSAP is at capacity to obtain

alternate transmission resources with the emergency call to a PSAP being a preferred

priority.

Ertz further teaches wherein the determining device to determine the priority of the

instance of access are configured such that the priority is determined with at least one of

destination information items transferred in the course of the current instance of access

(Fig. 1, col. 10 lines 45-61, Fig. 20, col. 12 lines 39-57, claim 38 lines 1-28) referenced by

the Platform 204 performing a Check Destination 100 for preferred priority calls to PSAP

103 or non priority PSTN Destination Number 101 wherein the preferred priority call is

based on emergency 9-1-1 digits of the current call and the ANI identifier, and with

information items transferred in the course of the current instance of access and

representing the type of the information items to be transferred (col. 10 lines 45-61)

referenced by the emergency 9-1-1 digits and the ANI of the current call representing a

preferred priority, the priority of the allocated transmission resources being determined

during the information transfer by the type of transferred information items (Fig. 1, col. 10

lines 45-61, Fig. 20, col. 12 lines 39-57, claim 38 lines 1-28) referenced by the Platform

204 performing a Check Destination 100 for preferred priority calls to PSAP 103 or non

priority PSTN Destination Number 101 wherein the preferred priority call is based on

emergency 9-1-1 digits of the current call and the ANI identifier.

Ertz does not teach for the information transfer are released or made available or corresponding transmission resources allocated for the transfer of information items assigned a low priority are released or made available.

Shionozaki discloses a method and apparatus that enables reallocation of resources from low priority sessions to meet he demand of a higher priority session (Abstract; Fig. 3).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Ertz by enabling the allocation of resources for the required information transfer by freeing resources of existing, lower priority sessions, as taught by Shionozaki. This would maximize the available resources of a network while accommodating the highest priority sessions.

- Regarding Claim 13,

Ertz teaches wherein the device for rendering available the required transmission resources is configured such that the transmission resources made available are allocated to the instance of access for the information transfer (Fig. 1, Fig. 63, col. 105 lines 19-26) referenced by the Platform 204 determination that the destination PSAP is not at capacity and can accept another call step 17 wherein the call is routed to the PSAP.

- Regarding Claim 14,

Ertz teaches wherein the allocated transmission resources assigned to the at least one switching device are arranged between at least one of the at least one switching device and at least one further switching device (Fig. 1, col. 8 lines 58-67, col. 9 lines 1-12)

referenced by the Public Telephone Network 219 which inherently is composed of

telephone switching devices and the Call Routing Switch 218 of Platform 204, and are

arranged between the at least one switching device and at least one front-end device

arranged in the subscriber access area of the switching device (Fig. 2, col. 10 lines 8-29,

lines 45-67) referenced by the Call Routing Switch 218 and the Applications Processor 234

which is a front end for searching the TN/ESN table 213 using a combination of NPD and

ANI information which is accessible through Workstation 212.

- Regarding Claim 17,

Ertz teaches wherein the transmission resources assigned to the switching

device are implemented by trunks outgoing from the at least one switching device or by

outgoing time-division-multiplex-oriented transmission channels (Fig. 1, col. 8 lines 58-

66) referenced by the Emergency Service trunk 206 to/from the Call Routing Switch 218

from the Public Telephone Network 219 and the outgoing trunks to the Public

Telephone Network 219 for termination to the PSAP all of which are inherently time

division multiplexed lines.

Response to Arguments

3.   Applicant's arguments filed 8/13/2007 have been fully considered but they are not

persuasive.

- In the Remarks on pg. 6-7 of the Amendment, Applicant contends that Ertz does

  not disclose determining the priority of an access to the communications network

  using destination information items transferred in the course of the current

  instance of access, as required by independent claims 1 and 12. Applicant

  specifically points to the ANI code discussed in Ertz, showing that the ANI is a

  source information item rather than a destination.

- The Examiner respectfully disagrees. As shown in the rejections of claims 1 and

  12 above, Ertz discloses determining priority for an emergency 911 call

  referenced by initial destination lookup from an ESN table (emphasis added), in

  addition to the ANI information cited by Applicant. Therefore, Ertz properly

  rejects the contested limitation and the claim rejections are proper.

Conclusion

4.   Applicant's amendment necessitated the new ground(s) of rejection presented in this

Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant

is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this

final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Gregory B. Sefcheck whose telephone number is 571-272-

3098. The examiner can normally be reached on Monday-Friday, 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Wing Chan can be reached on 571-272-7493. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private

PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you

would like assistance from a USPTO Customer Service Representative or access to the

automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

GBS
10-12-2007.

WING CHAN
SUPERVISORY PATENT EXAMINER